New Reared Neotropical Species of Rogas Nees (Hymenoptera: Braconidae)

By C. F. W. Muesebeck, U. S. National Museum, Washington, D. C.

The Neotropical species of *Rogas* are mostly undescribed. Recently I received specimens of a new species from Nicaragua that had been reared from *Laphygma frugiperda* and for which a name is needed. This species is described here, together with three other new forms that are represented in the National Museum collection by good series of reared specimens.

Rogas vaughani, new species

From the more common *R. laphygmae* Viereck, which parasitizes the earlier instars of the same host, this species differs strikingly in its black head, in its enormous eyes, with resultant short malar space and narrow face, and in having the radiellan cell widening apically.

Female. Length about 6 mm. Head strongly transverse; temple only about one-fourth as wide as eye; eyes much longer than greatest width of face; malar space about half as long as first segment of antennal flagellum; ocellocular line and post-ocellar line one-half the longest diameter of a lateral ocellus; face and clypeus very finely rugulose; frons, vertex and temples delicately shagreened; third and fourth segments of maxillary palpus conspicuously thickened; antennae normally 43- to 48-segmented.

Mesoscutum finely shagreened and subopaque; notauli very weak although complete and ending in a quadrate rugulose area behind the middle lobe; side of pronotum not sculptured in front of impression; mesopleuron smooth and polished except for a finely rugulose area just below tegula; propodeum finely rugulose and dull, the median longitudinal carina very weak and sometimes distinct only at extreme base. Second cubital cell of forewing not noticeably narrowing outwardly, and its height not greater than extreme width of radial cell; second abscissa of radius more than twice as long as the first, the third not dis-

tinctly more than twice the second; nervulus postfurcal by more than twice its length; mediella and lower abscissa of basella subequal; radiellan cell widening conspicuously toward apex of wing.

First and second tergites finely longitudinally rugulose and with a median longitudinal carina; the first tergite fully as wide at caudal margin as long; the second with a narrowly transverse, sharply margined and polished plate at base; the third weakly roughened basally; remainder of abdomen smooth. Ovipositor sheath slightly longer than second segment of hind tarsus.

Reddish yellow; head black; antennae black; palpi piceous; wings hyaline, the stigma and veins very dark; middle tarsus dusky; apex of hind tibia and the hind tarsus blackish; ovipositor sheath black.

Male. Essentially as in the female except that the abdomen is usually somewhat piceous apically.

Type. U. S. National Museum No. 65047.

Type-locality. Managua, NICARAGUA.

Described from twelve females and 5 males reared by Mario Vaughan R. in July, 1958, from nearly mature larvae of *Laphygma frugiperda* (J. E. Smith).

Rogas fortis, new species

This belongs to the same section of the genus as the preceding species, agreeing with that form in having a widening radiellan cell and a smooth and polished transverse plate at the base of the second tergite. It differs from *vaughani* especially in its much smaller eyes and wider face, in its slender maxillary palpi, in its completely sculptured mesopleuron and its largely yellow antennae.

Female. Length about 7.5 mm. Face broader than eye height and strongly transversely rugulose; transverse diameter of opening between clypeus and mandibles greater than distance from this opening to eye; temple about two-thirds as wide as eye; malar space longer than first segment of antennal flagellum; ocellocular line at least as long as longest diameter of an ocellus, postocellar line shorter; from and vertex rather strongly rugu-

lose, temples more weakly so; antennae 58- to 63-segmented in the specimens examined.

Lobes of mesoscutum finely shagreened; notauli sharply impressed and foveolate, ending in a coarsely rugose area behind middle lobe; side of pronotum entirely rugose; mesopleuron and metapleuron rugulose punctate; propodeum rugose and with a median longitudinal carina that is sometimes weak or indistinct on posterior declivity. Inner calcarium of hind tibia as long as second tarsal segment. Second cubital cell not noticeably narrowing outwardly, its height at least as great as greatest width of radial cell; second abscissa of radius twice as long as first but decidedly less than half as long as third; nervulus postfurcal by a little more than its length; mediella conspicuously longer than lower abscissa of basella; radiellan cell widening toward apex of wing.

First and second tergites strongly longitudinally rugulose, the first as long as wide on caudal margin and with a complete median longitudinal carina; second tergite with the median carina strong at base but becoming weaker apically and usually incomplete; third tergite finely longitudinally aciculate on basal half, coriaceous beyond, and without a median carina. Ovipositor sheath about as long as second segment of hind tarsus.

Reddish brown; head black or blackish; antenna with scape and pedicel black, basal two-thirds of flagellum yellow and apical third piceous; thorax often varied with black and occasionally largely black; wings hyaline, stigma dark; legs entirely red or yellowish red.

Male. Like the female except that the thorax is usually mostly or entirely black and the abdomen is usually blackish beyond the third tergite; also the antennal flagellum is less extensively yellow.

Type.—U. S. National Museum No. 65048.

Type-locality. Montivideo, URUGUAY.

Described from thirteen females and six males reared by H. L. Parker at the type locality from the armyworm, *Pseudaletia unipuncta* (Haworth); and two females labeled as having been reared from an unidentified noctuid, also by Dr. Parker at Montivideo.

Rogas conformis, new species

In structure and sculpture this form seems to agree completely with *fortis*, described just above; but it differs strikingly in its black legs and black antennal flagellum.

Female. Length about 7.5 mm. Remarkably similar to fortis in structure and sculpture of head, thorax and abdomen and in details of wing venation; but the antennae are completely black, all femora and tibiae are black, and the hind tarsi are more or less infuscated.

Male. Essentially like the female.

Type. U. S. National Museum No. 65049.

Type-locality. "About 20 kilometers west of Montivideo, between Punta Yeguas and Punta Espanillo."

Described from six females and one male from the type locality, reared from *Farontia albilinea* (Hbn.) by H. L. Parker in 1944; and two females and one male reared by Dr. Parker from *Pseudaletia unipuncta* (Haw.) at Montivideo, Uruguay together with *R. fortis*.

Rogas gossypii, new species

This species is exceedingly similar to *laphygmae* Viereck and it is sometimes not easily distinguished. On the basis of specimens examined in this study, however, the two species can be separated by the number of antennal segments: *laphygmae* normally has 33- to 36-segmented antennae, whereas in *gossypii* the antennae are 38- to 41-segmented. Other differences, as in the size of the ocelli, in the relative length of the second cubital cell, and in the extent to which the nervulus is postfurcal, are good but they are subtle and difficult to use without material of both species for comparison.

Female. Length about 5 mm. Face not wider than eye height; temple strongly receding, less than half as wide as eye; malar space longer than first segment of antennal flagellum; diameter of opening between clypeus and mandibles shorter than distance from this opening to eye; face very finely shagreened; frons, vertex and temples coriaceous; ocellocular line not or

barely longer than longest diameter of an ocellus; postocellar line usually little more than half the diameter of an ocellus; antennae 39- to 41-segmented in the specimens examined.

Mesoscutum sculptured like face except for a rugose area behind middle lobe; notauli distinct anteriorly, not distinct posteriorly; side of pronotum rugose; mesopleuron and metapleuron finely, closely, granularly sculptured; propodeum finely rugulose and with a well developed median longitudinal carina. Anterior wing with second cubital cell longer than in *laphygmae*, the second abscissa of radius at least twice as long as first; nervulus more strongly postfurcal than in *laphygmae*, its distance from basal vein being one and one-half to two times its length; radiellan cell not broadening apically, poorly defined; mediella a little longer than lower abscissa of basella.

Abdomen with tergites 1, 2 and 3 longitudinally rugosostriate, each of them with a median longitudinal carina, that on the third fading out caudad; fourth tergite sculptured but much more weakly than the third; fifth and following smooth. Ovipositor sheath as long as second segment of hind tarsus.

Honey yellow; antennae above and the stemmaticum a little darkened; wings hyaline, the stigma yellow but sometimes with a dusky blotch at the middle.

Male. Essentially like the female. Antennae of the specimens examined 38- to 40-segmented.

Type. U. S. National Museum No. 65050.

Type-locality. Jaboticabal, Sao Paulo, BRAZIL.

Described from 2 females and 2 males from the type locality, reared by E. J. Hambleton, March, 1936, from Alabama argillacea (Hbn.); 4 females and 1 male reared by Mr. Hambleton from the same host at Vicosa, Minas Gerais, Brazil; 8 females and 15 males reared from A. argillacea at Maracay, Venezuela by F. Fernandez in August, 1945; 2 females reared from A. argillacea at Armero, Colombia in June, 1938, by V. Velasco L.; and many specimens of both sexes labeled as reared from Anomis sp. on cotton in the state of Pernambuco, Brazil, in January and February, 1883; also 5 from Anomis sp. on cotton at Chimbote, Peru, reared by H. D. Dusters in May, 1927.